ABSTRACT

[Abstract]

[Problem]

To provide a reliable motor drive circuit capable of preventing over-current of power transistors when a resistor for detecting an output current of a power transistor is short-circuited and of allowing a continuous drive operation of the power transistors.

[Means for Resolution]

An over-current protection circuit of a semiconductor circuit including a power transistor for outputting current output, a first output current detection circuit and a current limiter circuit for limiting the output current by stopping the output current of the power transistor for a predetermined period in response to a first detection signal from the output current detection circuit when the output current of the power transistor reaches a predetermined limit value, comprises an output current detection transistor current-mirror connected to the power transistor and a second output current detection circuit for generating a second detection signal according to an output current of the output current detection transistor when the output current reaches the predetermined limit value, wherein the output current of the power transistor is cut off for the predetermined period by operating the current limiter circuit in response to the second detection signal.

[Selected Drawing] Fig. 1